

20 Years Ago at JSC

Enterprise makes stopover at JSC

Thousands attend awards ceremony and Open House

Reprinted from the March 17, 1978, issue of Space News Roundup.

Nearly a quarter of a million area residents turned out over the week-end to view the *Enterprise*, according to Air Police at the Ellington Air Force Base.

When *Enterprise*, America's newest spacecraft put into the Marshall Space Flight Center on March 13, it officially brought to an end the very successful approach and landing test project.

Donald K. Slayton, who headed up the more than 600-member NASA/industry and Department of Defense team which worked on ALT said, "completion of ALT now allows us to begin orbital flight testing with a high level of confidence, both in the spacecraft and the personnel who will conduct the orbital flight test program." It was a NASA-wide effort, a program which utilized a wide variety of talents from JSC, the Kennedy Space Center, and Dryden Flight Research Center as well as industry and DOD, Slayton said.

At an award ceremony at Houston, Slayton, who is now manager of OFT for the Space Shuttle Program Office at JSC, told his team leaders, "I wish to thank each member of the ALT team for their exceptional performance." For his leadership in ALT, Slayton was presented the NASA Outstanding Leadership Medal while 15 other key NASA personnel, including astronaut crew and 747 members, were presented NASA Exceptional Service Medals for their role in ALT: nine JSC employees, five employees from DFRC, and one from KSC.

Christopher C. Kraft, JSC Director, presented the awards before an enthusiastic crowd of 25,600 people

plane-side after the 747/*Enterprise* landed at the Ellington Air Force Base, north side of JSC, on a refueling stop enroute to MSFC.

The award to Slayton credited him for organizing and molding "a diverse group of NASA, DOD and contractor personnel into a dynamic test team that successfully planned and carried out the ALT program." His outstanding leadership was a major factor in the success of the ALT flights," the award read.

Astronauts Haise (who could not attend the ceremony), Fullerton, Engle and Truly received their awards for their role as members of the ALT Orbiter Crew.

Other recipients at JSC were Thomas U. McElmurry, who was commended for the operational planning, organization, and day-to-day management of ALT: Carl B. Peterson, whose award was for his management of the 747 carrier aircraft modification program; John W. Kiker, who conceived the idea of utilizing the 747 as the carrier of the orbiter; Louis E. Guidry, aircraft engineer, who was a key member of the 747 carrier aircraft during the entire ALT program; and Donald R. Puddy, Flight Director, who demonstrated exceptional ability in preparing and directing the ALT flight control team at JSC.

Those at DFRC who received the exceptional service medal included 747 crew members Fitzhugh L. Fulton, Jr.; Thomas C. McMurty; Flight Engineer Victor W. Horton; and William H. Andrews, the Shuttle Carrier Aircraft Test Team Manager. John G. McTigue of DFRC was awarded the Exceptional Service Medal for his outstanding leadership to the entire ground operations engineering test team which included NASA representatives from KSC,



JSC PHOTO

A RECORD CROWD—This photograph shows just a fraction of those who were on hand to view the Ellington Landing.

JSC, DFRC and industry.

The Highway Patrol officially estimated another 5000 cars parked on Texas Highway 3 waiting for the 747/*Enterprise* arrival, and people from all over the JSC site watched as the 747 made its sweep over Bldg. 2 and around the Center.

There was a total of 13 flights in ALT, beginning with the taxi-tests of the mated 747/orbiter combination in February and concluding with the fifth and final "free flight" on October 2, 1977. After the initial taxi-tests, there were five unmanned "inert" captive flights during which the 747 carried the Orbiter *Enterprise* with its systems inactive to assess the vehicle's combined structural integrity as well as determine its aerodynamic performance at various speeds and altitudes.

The five captive unmanned flights were followed by three manned captive flights during which time astronaut crews performed numerous system and performance tests while

the Orbiter remained attached to the top of the 747 carrier aircraft.

The first free flight with astronauts Haise and Fullerton at the controls of the 75-ton Orbiter *Enterprise* was successfully flown on August 12, 1977. The Orbiter was released from the 747 at an altitude of 24,100 and Haise and Fullerton piloted the spacecraft to a successful landing at Edwards Air Force Base dry lake runway five minutes and 21 seconds later.

A second flight, with astronauts Engle and Truly at the controls of *Enterprise* took place on September 13. This was a five and a half minute flight after which spacecraft commander Engle said the Orbiter performed superbly. Pilot Truly said *Enterprise* was an excellent handling machine.

Three more flights of the Orbiter from its carrier aircraft followed and the flight test program ended with the fifth and final flight on October 12. With Haise and Fullerton at the con-

trols, the Orbiter made a landing on the hard surface runway of Edwards.

A series of "ferry flights" followed. These tests, which were completed in mid-November, assessed the aerodynamic characteristics of the combined 747/Orbiter vehicle in the "ferry mode". The ferry mode will be used during operational Shuttle flights where the Orbiter is transported cross-country from its manufacturing site to launch sites and subsequent landing sites back to launch sites, either at Kennedy Space Center, Florida, or the U.S. Air Force launch site at Vandenberg, California.

The ALT program officially ended with the delivery of *Enterprise* to MSFC where it will now undergo a series of ground vibration tests preparatory to the initial OFT now scheduled for the spring of 1979. The first orbital vehicle will be Orbiter 102, now being assembled at the Rockwell International facility at Palmdale, California.

Gilruth Center News

Hours: The Gilruth Center is open from 6:30 a.m.-10 p.m. Monday-Thursday, 6:30 a.m.-9 p.m. Friday, and 9 a.m.-2 p.m. Saturday.

Sign up policy: All classes and athletic activities are on a first come, first served basis. Sign up in person at the Gilruth Center and show a yellow Gilruth or weight room badge. Classes tend to fill up two weeks in advance. Payment must be made in full, in exact change or by check, at the time of registration. No registration will be taken by telephone. For more information, call x30304.

Gilruth badges: Required for use of the Gilruth Center. Employees, spouses, eligible dependents, NASA retirees and spouses may apply for photo identification badges from 7:30 a.m.-9 p.m. Monday-Friday; and 9 a.m.-2 p.m. Saturdays. Cost is \$10. Dependents must be between 16 and 23 years old.

Weight safety: Required course for employees wishing to use the Gilruth weight room. The next classes are scheduled for at 8 p.m. March 26 and April 9 (must be on time to receive credit for class). Pre-registration is required. Cost is \$5. Annual weight room use fee is \$90. Additional family members are \$50.

Exercise: Low impact class meets from 5:15 p.m.- 6:15 p.m. Mondays & Wednesdays. Cost \$24.00 for 8 weeks.

Stamp Club: Meets every 2nd and 4th Monday at 7:00 p.m. in room 216.

Akido: Introduction to Aikido beginning classes start every month. Class meets Tuesday and Wednesday from 5:15 p.m. to 6:15 p.m. Instruction by 4th Degree Black Belt. Learn to defend yourself & get a great aerobic workout. Cost is \$35.00 per month.

Step/bench aerobics: Low impact cardiovascular workout, classes every Monday, Tuesday & Thursday from 5:15 p.m. to 6:15 p.m. Cost is \$32.00 for 8 weeks- Kristen Taragzewski instructor. x36891

Ballroom Dance Lessons: Classes meet every Thursday from 7:00 p.m. to 8:15 p.m. for Beginner Advanced Classes and classes for Beginner-Intermediate & Intermediate are from 8:15 p.m. to 9:30 p.m. Cost is \$60.00 per couple.

Fitness Program: Health Related Fitness Program includes medical examination screening, 12 week individually prescribed exercise program. Call Larry Wier at x30301 for more information.

C & W Dance Lessons: Beginner class 7:00 p.m. to 8:30 p.m. Mondays. Advanced class (must know basic steps to all dances) 8:30 p.m.-10:00 p.m. Cost is \$20.00 per couple.

Defensive Driving Course: Class is offered once a month at the Gilruth Center. Interested parties must pre-register. Cost \$25.00.

Nutrition Intervention Program: Would you like to learn more about the role diet & nutrition play in your health? Open to all NASA Civil servants, contractors and spouses, this 6 week program includes private consultation with the Dietitian, a lecture series and blood analysis to chart your progress. Contact: Ms Tammie Shaw 32980

Gilruth Home Page: Check out all activities at the Gilruth online at: <http://www4.jsc.nasa.gov/ah/exceaa/Gilruth/Gilruth.htm>

Ticket Window

The following discount tickets are available for purchase in the Bldg. 11 Exchange Store from 10 a.m.-2 p.m. Monday-Thursday and 9 a.m.-3 p.m. Friday and in the Bldg. 3 Exchange Store from 7 a.m.-4 p.m. Monday - Friday. For more information call x35350 or x30990.

Moody Gardens: Tickets are \$9.75 for two of four events

Space Center Houston: Adults, \$10.25; children (4-11), \$7. JSC civil service employees free.

Movie discounts: General Cinema, \$5.50; AMC Theater, \$4.75; Sony Loew's Theater, \$5.

Stamps: Book of 20, \$6.40

Disney on Ice: "Hercules" 11:30 a.m. March 28 at the Compaq Center. Tickets are \$13.

JSC Picnic: 11 a.m. - 7:30 p.m. April 5 at Astroworld. Tickets are \$23.65.

Metro passes: Tokens and value cards available.

Coming Soon: Astroworld season passes, Sea World, Splashtown Water Park.

Roundup Deadlines

The Space News Roundup is published every other Friday. Story ideas should be submitted as far in advance as possible, but no later than two weeks prior to the date of publication.

The deadline for Dates & Data calendar items is three weeks prior to the date of publication.

Stories and ideas should be submitted to Editor Kelly Humphries in Bldg. 2, Rm. 180, or via e-mail to kelly.o.humphries1@jsc.nasa.gov.

Retirees should submit change of address notices to the distribution group at Mail Code BT552 or call Ignacia Ramirez at 281-483-6161.